UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,958	03/17/2004	Karl Pfleger	16113-326001/GP-134-10-US	4198

26192 7590 07/03/2007

FISH & RICHARDSON P.C.
PO BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
PULLIAM, CHRISTYANN R	
ART UNIT	**PAPER NUMBER**
2165	

MAIL DATE	DELIVERY MODE
07/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,958	PFLEGER ET AL.	
	Examiner	Art Unit	
	Christyann Pulliam	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 29-52 are pending as filed April 23, 2007. Claims 1-28 are canceled. Claims 29-52 are new.

2. Based on the new grounds of rejections necessitated by amendment, this action is FINAL.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 41-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The machine-readable media includes non-statutory subject matter. While "machine-readable media" is not specifically defined, it appears to be the same as "computer-readable media". The specification on pages 4-5 defines a computer readable medium to include non-statutory matter like transmission media. See MPEP § 2106-2106.02. Additionally, in order to clarify the requirements of the claim so that steps are not optional, change "operable to" to "configured to". Accordingly, Claims 41-52 contain non-statutory subject matter.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 29-30, 33-42 and 45-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al., U.S. PGPub. No. 2003/0135490 (hereinafter Barrett) and in view of Whitman et al., U.S. Patent No. 6,772,150 (hereinafter Whitman).

As for Claims 29 and 41, Barrett teaches:

identifying user interaction with a first document in a result set that is responsive to the search query (See e.g. Barrett – paragraphs [0010-0013]);

...changing a ranking of a popularity of the first document based at least in part on the user interaction with the first document (See e.g. Barrett Claims 1-3 and paragraph [0004-0005])...and

making the rank of the popularity of the first document available for responding to a subsequent search query (See e.g. Barrett - Claim 6 and paragraph [0010-0012]).

Barrett adjust the ranking of documents based on a variety of criteria including time and clicks. Barrett does not specifically use query breadth. However, Whitman teaches:

estimating a breadth of a search query (See e.g. Whitman - col. 5, lines 48-57);

identifying user interaction with a first document in a result set that is responsive to the search query (See e.g. Whitman - col. 2, lines 30-38 and col. 3, lines 60-67);

... the breadth of the search query, wherein an amount of the change in the ranking of the popularity decreases with increased breadth of the search query (See e.g. Whitman - col. 2, lines 26-40 and col. 12, lines 39-46). Whitman also makes that information available for future use (See e.g. Whitman - col. 2, lines 26-40 and col. 12, lines 39-46).

Barrett and Whitman are from the analogous art of improving search results. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Barrett and Whitman to have combined Barrett and Whitman. The motivation to combine Barrett and Whitman comes from the desire to improve the relevance of search results. Both track use and clicks order to provide the most relevant and useful results at the top of the search result sets.

As for Clams 30 and 42, Barrett as modified by Whitman teaches parent Claims 29 and 41. Whitman also teaches wherein estimating the breadth of the search query comprises estimating the breadth based on a total number of documents in a result set that is responsive to the search query (See e.g. Whitman - col. 2, lines 26-40 and col. 12, lines 39-46 and Claim 15).

As for Clams 33 and 45, Barrett as modified by Whitman teaches parent Claims 29 and 41. Whitman also teaches wherein ranking the popularity of the first document

comprises weighting the user interaction with the first document based on the breadth of the search query (See e.g. Whitman – col. 11, lines 35-56).

As for Clams 34 and 42, Barrett as modified by Whitman teaches parent Claims 29, 33, 41 and 45. Whitman and Barrett both also teach wherein ranking the popularity of the first document further comprises adding the weighted user interaction to a popularity database configured to store measures of a popularity of documents (See e.g. Whitman – col. 2, lines 24-40 and Barrett – Claim 6 and paragraph [0041]).

As for Clams 35 and 47, Barrett as modified by Whitman teaches parent Claims 29 and 41. Whitman and Barrett both also teach wherein identifying user interaction with the first document comprises determining a click count for the first document (See e.g. Whitman – col. 2, lines 24-40 and col. 11, lines 35-56 and Barrett – paragraph [0041]).

As for Clams 36 and 48, Barrett as modified by Whitman teaches parent Claims 29 and 41. Whitman also teaches wherein identifying user interaction with the first document comprises determining a click-through ratio for the first document (See e.g. Whitman – col. 3, lines 60-64).

As for Clams 37 and 49, Barrett as modified by Whitman teaches parent Claims 29 and 41. Barrett also teaches wherein identifying the user interaction with the first

document comprises identifying the user interaction independent of a search query (See e.g. Barrett – paragraph [0040] – time of day or user type or region considered to adjust ranking to improve results).

As for Clams 38 and 50, Barrett as modified by Whitman teaches parent Claims 29 and 41. Barrett also teaches further comprising responding to a subsequent search query based at least in part on the rank of the popularity of the first document (See e.g. Barrett – paragraphs [0004] and [0011]).

As for Clams 39 and 51, Barrett as modified by Whitman teaches parent Claims 29, 38, 41 and 50. Barrett also teaches wherein responding to the subsequent search query comprises adjusting a ranking of documents in the response to the subsequent search query based at least in part on the rank of the popularity of the first document (See e.g. Barrett – paragraphs [0004] and [0011]).

As for Clams 40 and 52, Barrett as modified by Whitman teaches parent Claims 29 and 41. Barrett also teaches wherein changing the ranking of the popularity of the first document comprising increasing the ranking of the popularity of the first document (See e.g. Barrett – paragraphs [0013] – "the results users wanted are rising to the top" and [0036]).

7. Claims 31 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Whitman as applied above and in further view of Conklin et al., U.S. Patent No. 6,363,378 (hereinafter Conklin).

As for Clams 31 and 43, Barrett as modified by Whitman teaches parent Claims 29 and 41. Barrett does not expressly look at the drop-off rate of relevance. However, Conklin teaches wherein estimating the breadth of the search query comprises estimating the breadth of the search query based on differences in relevances of documents in the result set (See e.g. Figure 5 and col. 9, line 61- col. 10, lines 21).

Barrett and Conklin are from the analogous art of improving search results. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Barrett and Conklin to have combined Barrett and Conklin. The motivation to combine Barrett and Conklin comes from the desire to improve the relevance of search results. Both track use and clicks order to provide the most relevant and useful results at the top of the search result sets. Conklin acknowledges that a drop-off in relevancy decreases the chances that the document will be the one the user wants.

8. Claims 32 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Whitman as applied above and in further view of Holt et al., U.S. Patent No. 6,601,061 (hereinafter Holt).

As for Clams 32 and 44, Barrett as modified by Whitman teaches parent Claims 29 and 41. Barrett does not specifically consider the retrieval rate. However, Holt teaches wherein estimating the breadth of the search query comprises comparing rates at which the documents in the result set are retrieved (See e.g. col. 7, line 60- col. 8, line 6 – response time used in ranking).

Barrett and Holt are from the analogous art of improving search results. It would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Barrett and Holt to have combined Barrett and Holt. The motivation to combine Barrett and Holt comes from the desire to improve the relevance of search results. Both track use and clicks order to provide the most relevant and useful results at the top of the search result sets. Holt adds the consideration of availability and speed of resources help improve the search results.

Response to Arguments

9. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christyann Pulliam whose telephone number is 571-270-1007. The examiner can normally be reached on M-F 9 am-6 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRFP 6/26/2007
CRFP

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100